

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
**WO 2004/056558 A1**

(51) International Patent Classification<sup>7</sup>: **B29D 30/42**

(21) International Application Number:  
**PCT/NL2003/000926**

(22) International Filing Date:  
23 December 2003 (23.12.2003)

(25) Filing Language: **Dutch**

(26) Publication Language: **English**

(30) Priority Data:  
1022246 23 December 2002 (23.12.2002) NL

(71) Applicant (*for all designated States except US*): VMI EPE HOLLAND B.V. [NL/NL]; Gelriaweg 16, NL-8161 RK Epe (NL).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): GUTKNECHT, Heinz [NL/NL]; Torenweg 26, NL-8161 AT Epe (NL).

(74) Agent: DE HOOP, Eric; C/o Octroobureau Vriesendorp & Gaade, P.O. Box 266, NL-2501 AW The Hague (NL).

(81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, EG, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT (utility model), PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

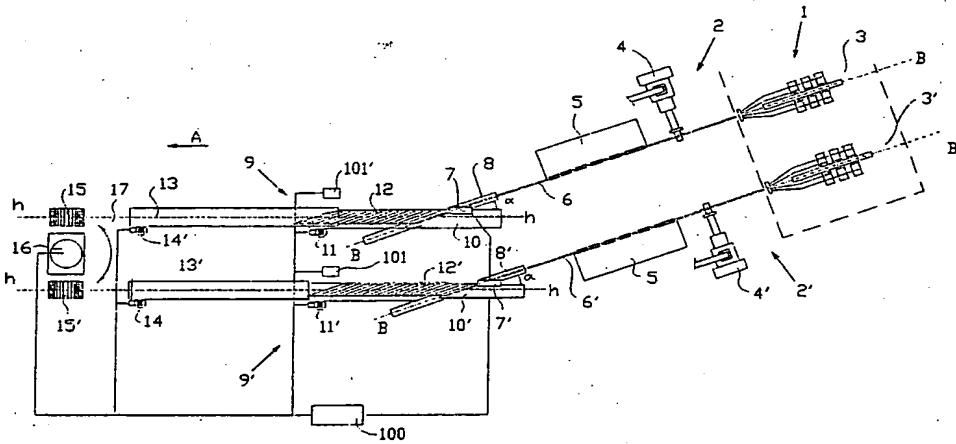
(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,*

*[Continued on next page]*

(54) Title: DEVICE AND METHOD FOR PRODUCING A BREAKER PLY



WO 2004/056558 A1

(57) **Abstract:** The invention relates to a method for manufacturing a breaker ply having a longitudinal axis, a breaker ply (12) length and mutually parallel cords at a pre-set cord angle to the longitudinal axis (A), wherein a continuous rubber strip (6) is provided with substantially parallel longitudinal cords; a set strip width and set centre-to-centre distance between the longitudinal cords one to the other, is produced in the longitudinal direction by means of a continuous extrusion process, the continuous rubber strip is cut into bands at the cord angle, a predetermined number of bands having cords substantially parallel to each other at a set band distance with respect to each other for forming a breaker ply having a (12) pre-set breaker ply length are placed on a support surface (10), wherein the mutual distance of the bands is calculated in order to realise a set length of the breaker ply, when the breaker ply has reached the target breaker ply length, the breaker ply is transported in the longitudinal direction to a building drum (15) and is wound onto the building drum, as well as a device for it.